CLAIMS

1. A polymorph (A) of 4-(3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy)-7-methoxy-6-quinolinecarboxamide, having a diffraction peak at a diffraction angle (2θ ± 0.2°) of 15.75° in a powder X-ray diffraction.

2. The polymorph (A) according to claim 1, wherein the polymorph further has diffraction peaks at diffraction angles (2θ ± 0.2°) of 9.98° and 11.01° in a powder X-ray diffraction.

3. A polymorph (A) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide, having an absorption band at a wavenumber of 3452.3 ± 2.5 cm^{-1} in an infrared absorption spectrum in potassium bromide.

4. The polymorph (A) according to claim 1 or 2, wherein the polymorph has an absorption band at a wavenumber of 3452.3 ± 2.5 cm^{-1} in an infrared absorption spectrum in potassium bromide.

5. The polymorph (A) according to claim 3 or 4, wherein the polymorph further has an absorption band at a wavenumber of 1712.2 ± 1.0 cm^{-1}.

6. A polymorph (B) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide, having a diffraction peak at a diffraction angle (2θ ± 0.2°) of 21.75° in a powder X-ray diffraction.

7. The polymorph (B) according to claim 6, wherein the polymorph further has diffraction peaks at diffraction angles (2θ ± 0.2°) of 12.43° and 16.56° in a powder X-ray diffraction.

8. A polymorph (B) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide, having an absorption band at a wavenumber of 1557.6 ± 1.0 cm^{-1} in an infrared absorption spectrum in potassium bromide.

9. The polymorph (B) according to claim 6 or 7, wherein the polymorph has an absorption band at a wavenumber of 1557.6 ± 1.0 cm^{-1} in an infrared absorption spectrum in potassium bromide.

10. The polymorph (B) according to claim 8 or 9, wherein the

polymorph further has an absorption band at a wavenumber of 1464.4 ± 1.0 cm^{-1}.

11. A process for the preparation of the polymorph (A) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 1 to 5, comprising a step of dissolving 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide in a good organic solvent, followed by rapid admixing with a poor solvent.

12. A process for the preparation of the polymorph (A) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 1 to 5, comprising a step of dissolving 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide in a good organic solvent with stirring, followed by admixing with a poor solvent in such a way that the resultant crystals precipitate when the stirring is stopped.

13. A process for the preparation of the polymorph (A) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 1 to 5, comprising a step of reacting 7-methoxy—4-chloro-quinoline-6-carboxamide with 1-(2-chloro-4-hydroxyphenyl)-3-cyclopropylurea in the presence of a base in a good organic solvent for 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide, followed by rapid admixing with a poor solvent.

14. The process for the preparation according to any one of claims 11 to 13, wherein the poor solvent is admixed rapidly within 10 minutes.

15. A process for the preparation of the polymorph (B) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 6 to 10, comprising a step of dissolving 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide in a good organic solvent, followed by slow

admixing with a poor solvent.

16. A process for the preparation of the polymorph (B) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 6 to 10, comprising a step of dissolving 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide in a good organic solvent while stirring, followed by admixing with a poor solvent in such a way that the resultant crystals diffuse when the stirring is stopped.

17. A process for the preparation of the polymorph (B) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 6 to 10, comprising a step of reacting 7-methoxy—4-chloro-quinoline-6-carboxamide with 1-(2-chloro-4-hydroxyphenyl)-3-cyclopropylurea in the presence of a base in a good organic solvent for 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide, followed by slow admixing with a poor solvent.

18. The process for the preparation according to any one of claims 15 to 17, wherein the poor solvent is admixed slowly in 1 hour or more.

19. A process for the preparation of the polymorph (B) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 6 to 10, comprising a step of heating a polymorph (A) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide, having a diffraction peak at a diffraction angle ($2\theta \pm 0.2°$) of 15.75° in a powder X-ray diffraction, in suspension in a mixed solvent of a good organic solvent for the polymorph and a poor solvent for the polymorph.

20. The process for the preparation according to claim 19, wherein the polymorph (A) is a polymorph further having diffraction peaks at diffraction angles ($2\theta \pm 0.2°$) of 9.98° and 11.01° in a powder X-ray diffraction.

21. A process for the preparation of the polymorph (B) of 4-[3-

chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide according to any one of claims 6 to 10, comprising a step of heating a polymorph (A) of 4-[3-chloro-4-(cyclopropylaminocarbonyl)aminophenoxy]-7-methoxy-6-quinolinecarboxamide, having an absorption band at a wavenumber of 3452.3 ± 2.5 cm^{-1} in an infrared absorption spectrum in potassium bromide, in suspension in a mixed solvent of a good organic solvent for the polymorph and a poor solvent for the polymorph.

22. The process for the preparation according to claim 19 or 20, wherein the polymorph (A) is a polymorph having an absorption band at a wavenumber of 3452.3 ± 2.5 cm^{-1} in an infrared absorption spectrum in potassium bromide.

23. The process for the preparation according to claim 21 or 22, wherein the polymorph (A) is a polymorph further having an absorption band at a wavenumber of 1712.2 ± 1.0 cm^{-1}.

24. The process for the preparation according to any one of claims 11 to 23, wherein the good organic solvent is dimethylsulfoxide, dimethylimidazolidinone, 1-methyl-2-pyrrolidinone, N,N-dimethylformamide, N,N-dimethylacetamide, acetic acid, sulforane, or a mixed solvent of at least two of the foregoing.

25. The process for the preparation according to any one of claims 11 to 23, wherein the poor solvent is water, acetone, acetonitrile, ethyl acetate, isopropyl acetate, methanol, ethanol, n-propanol, isopropanol, or a mixed solvent of at least two of the foregoing.

26. The process for the preparation according to claims 13, 14, 17 or 18, wherein the base is potassium t-butoxide, cesium carbonate or potassium carbonate.

27. A prophylactic or therapeutic agent for a disease for which angiogenesis inhibition is effective, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

28. An angiogenesis inhibitor, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

29. An anti-tumor agent, comprising as an active ingredient, the

polymorph according to any one of claim 1 to 10.

30. The anti-tumor agent according to claim 29, wherein the tumor is a pancreatic cancer, a gastric cancer, a colon cancer, a breast cancer, a prostate cancer, a lung cancer, a renal cancer, a brain tumor, a blood cancer or an ovarian cancer.

31. A therapeutic agent for angioma, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

32. A cancer metastasis inhibitor, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

33. A therapeutic agent for retinal neovascularization, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

34. A therapeutic agent for diabetic retinopathy, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

35. A therapeutic agent for an inflammatory disease, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

36. The therapeutic agent for an inflammatory disease according to claim 35, wherein the inflammatory disease is deformant arthritis, rheumatoid arthritis, psoriasis or delayed hypersensitivity reaction.

37. A therapeutic agent for atherosclerosis, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

38. A prophylactic or therapeutic method for a disease for which angiogenesis inhibition is effective, comprising administering to a patient, a pharmacologically effective dose of the polymorph according to any one of claim 1 to 10.

39. Use of the polymorph according to any one of claim 1 to 10 for the manufacture of a prophylactic or therapeutic agent for a disease for which angiogenesis inhibition is effective.

40. A c-Kit kinase inhibitor comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

41. An anti-cancer agent for treating a cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

42. The anti-cancer agent according to claim 41, wherein the cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase is acute myelogenous leukemia, mast cell leukemia, a small cell lung cancer, GIST, a testicular cancer, an ovarian cancer, a breast cancer, a brain cancer, neuroblastoma or a colorectal cancer.

43. The anti-cancer agent according to claim 41, wherein the cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase is acute myelogenous leukemia, a small cell lung cancer or GIST.

44. The anti-cancer agent according to claim 41, which is applied to a patient for which a cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase is identified.

45. A therapeutic agent for mastocytosis, allergy or asthma, comprising as an active ingredient, the polymorph according to any one of claim 1 to 10.

46. A therapeutic method for a cancer, comprising administering to a patient suffering from a cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase, a pharmacologically effective dose of the polymorph according to any one of claim 1 to 10.

47. The method according to claim 46, wherein the cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase is acute myelogenous leukemia, mast cell leukemia, a small cell lung cancer, GIST, a testicular cancer, an ovarian cancer, a breast cancer, a brain cancer, neuroblastoma or a colorectal cancer.

48. The method according to claim 46, wherein the cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase is acute myelogenous leukemia, a small cell lung cancer or GIST.

49. A therapeutic method for a cancer, comprising the steps of:
extracting cancer cells from a patient suffering from a cancer;
confirming that the cancer cells are expressing excessive c-Kit kinase or a mutant c-Kit kinase; and
administering to the patient a pharmacologically effective dose of the c-Kit kinase inhibitor according to claim 40.

50. A therapeutic method for mastocytosis, allergy or asthma,

comprising administering to a patient suffering from the disease, a pharmacologically effective dose of the c-Kit kinase inhibitor according to claim 40.

51. A method for inhibiting the c-Kit kinase activity, comprising applying to a cell expressing excessive c-Kit kinase or a mutant c-Kit kinase, a pharmacologically effective dose of the c-Kit kinase inhibitor according to claim 40.

52 Use of the c-Kit kinase inhibitor according to claim 40 for the manufacture of an anti-cancer agent for treating a cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase.

53. The use according to claim 52, wherein the cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase is acute myelogenous leukemia, mast cell leukemia, a small cell lung cancer, GIST, a testicular cancer, an ovarian cancer, a breast cancer, a brain cancer, neuroblastoma or a colorectal cancer.

54. The use according to claim 52, wherein the cancer expressing excessive c-Kit kinase or a mutant c-Kit kinase is acute myelogenous leukemia, a small cell lung cancer or GIST.

55. Use of the c-Kit kinase inhibitor according to claim 40 for the manufacture of a therapeutic agent for mastocytosis, allergy or asthma.